

Remarks

The Final Office Action dated February 3, 2011, indicates the following: claims 1, 3-10, 12 and 14-17 remain rejected under 35 U.S.C. § 103(a) over Tsuchi (US 2003/0160749) in view of Sakurai *et al.* (US 5,384,548); claims 11 and 13 remain rejected under 35 U.S.C. § 103(a) over the '749 reference in view of the '548 reference, and further in view of the Examiner's official notice; claim 2 remains rejected under 35 U.S.C. § 103(a) over the '749 reference in view of the '548 reference, and further in view of Nishimura (US 2001/0004255). In this discussion set forth below, Applicant traverses each rejection without acquiescing to any averment in the Office Action(s) of record or the Advisory Action, unless Applicant expressly indicates otherwise.

To facilitate prosecution, Applicant has amended claims 1, 10, and 14 to state the ratio of transconductance is kept constant over the entire input range. The claims are believed to be allowable because the '548 and '749 references, as previously interpreted, fail to suggest all aspects of the claims "as a whole" (§ 103(a)) including at least the above mentioned aspects. The Examiner previously acknowledged that these aspects are not taught by the '749 reference (*see*, Final Office Action at page 3). The cited embodiment of the '548 reference fails to cure this deficiency (*see* Col 2:32-36 "Both terms...are constant only for a small region of the common mode..."). For at least the above reasons, the claims are believed to be in condition for allowance.

New claims 18-21 are believed to be allowable for at least the above reasons. Support for the new and amended claims may be found throughout the application, *see*, for example, FIG. 8, and paragraphs 0020, 0048 and 0067 of Applicant's published specification.

Notwithstanding the above, for reasons previously presented and fully incorporated herein, Applicant maintains the traversal of the rejections because the Office Action failed to provide a valid motivation to combine the references or provide a valid explanation showing how the references were interpreted as suggesting all claimed aspects.

As explained in MPEP §2142: The Examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the Examiner does not produce

a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness.” (MPEP §2142 citing *KSR*, 550 U.S. 398). As explained in M.P.E.P. § 2143, “(t)he key to supporting any rejection under 35 U.S.C. § 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious.”

As explained in Applicant’s previous Response the Office Action fails to clearly articulate how the primary ‘749 reference could be or would be modified to operate as taught by the ‘548 reference. The Examiner’s response fails to clarify whether the proposed modification is to: 1) replace the input stage of the primary ‘749 reference with the input stage of the secondary ‘548 reference, using the rationale of interchangeably equivalent elements, or 2) use the teachings of the secondary ‘548 reference to show a property is inherent in the primary ‘759 reference.

In either case, as explained in Applicant’s previous response, the articulated rationale is not valid, and Applicant requests that the rejections be withdrawn. For example, because replacement of the input stage, on the basis of interchangeable equivalents, would appear to supplant the ‘749 reference in its entirety, it is unclear how such action can produce a valid combination of the references. It is also unclear how teachings of the secondary ‘548 reference could be inherent in the ‘749 reference because switches of the ‘749 reference are not operated to form a circuit equivalent to that of the ‘548 reference. FIGS. 3A and 3B show the circuits formed during operation of the ‘749 reference. It should be apparent that these circuits are distinctly different from the circuit illustrated in FIG. 1 of the ‘548 reference. Therefore, equivalence is not shown. Because the circuits are not equivalent, the Office Action fails to provide valid support for the proposition that teachings of the ‘548 are inherent in the ‘749 reference. Furthermore, because the drains of the PMOS doublet are coupled to the drains of the NMOS doublet in the ‘749 reference, it is unclear how the circuit could possibly be operated to be equivalent to the circuit of the ‘548 reference where the PMOS and NMOS doublets are not coupled. For at least the above reasons, the rejections are improper.

The rejections are further improper because the Office Action fails to explain how the ‘749 reference is interpreted as coupling an unused one of the NMOS or PMOS doublets to a reference voltage. Because the Office Action has failed to show where these aspects are disclosed, a *prima facie* case of obviousness has not been presented.

Applicant further traverses the Official Notice taken by the Examiner in the rejection of claims 11 and 13. The Examiner asserted that “it is well known in the art the use of LCDs with gate drivers and data drivers[,]” and “it is well known in the art the use of LCD panels. The Office Action is silent as to specific factual findings predicated on sound technical and scientific reasoning to support the conclusion of common knowledge. Furthermore, the Examiner has not explained how the asserted notice provides motivation to further modify the combination of the ‘749 and 548 references to include an LCD driver bank and a LCD. In the absence of such explanation, it would appear that the Examiner is broadly asserting that that it is well known to use a data driver for every LCD application. The cited portions of the Udo (U.S. 2002/0008684) (discussing a multiframe inverting function) and Youn (U.S. 2002/0089485) (discussing a specific data driver) do not appear to support such a proposition.

Furthermore, it is unclear how the LCD data driver bank in either of the ‘684 or ‘485 references would be modified to be driven by the proposed combination of circuits without disruption the operation of the LCD drivers. As explained in MPEP §2143.01 V, “If [the] proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification.” *In re Gordon*, 733 F.2d 900 (Fed. Cir. 1984).

The Official Notice is clearly in error because the Office Action has not provided specific factual findings predicated on sound technical and scientific reasoning to support the conclusion of common knowledge. If the rejection is maintained, Applicant respectfully requests the Examiner explain why a skilled artisan would be motivated to further modify the references so that the issue may be further considered.

For at least the above reasons the rejections are improper. Nonetheless, in light of the amendments, the issues are moot as all claims are believed to be allowable over the references of record.

In view of the above, Applicant believes that each of the rejections has been overcome and the application is in condition for allowance. Should there be any remaining issues that could be readily addressed over the telephone, the Examiner is asked to contact the attorney/agent overseeing the application file, David Schaeffer, of NXP Corporation at (212) 876-6170 (or the undersigned).

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